

### REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 3 and 4 are pending in this application. Claims 3 and 4 were rejected under 35 U.S.C. § 112, second paragraph. Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,483,854 to Klausmeier et al. (herein "Klausmeier") in view of U.S. patent 6,549,938 to Kilkki et al. (herein "Kilkki").

Addressing now the rejection of claims 3 and 4 under 35 U.S.C. § 112, second paragraph, that rejection is traversed by the present response.

Claim 3 is amended by the present response to delete the term "small". That amendment is believed to address the rejections to claims 3 and 4 under 35 U.S.C. § 112, second paragraph.

Addressing now the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as unpatentable over Klausmeier in view of Kilkki, that rejection is traversed by the present response.

Independent claim 3 is amended by the present response to additionally recite an operation of:

specifying, for a communication packet exchanged from an upper layer, in an interface between the upper layer and a physical layer, one of multiple connection handles each identifying a respective service class requested by the communication packet and corresponding to respective logical channels in the upper layer[.]

That feature is believed to be clear from the original specification, see for example page 14, line 19 et seq. With reference to Figure 5 in the present specification as a non-limiting example, in the claimed method for a communication packet from an upper layer 53, in an interface HCI between the upper layer 53 and a physical layer 52, one of multiple connection handles A-N are specified to identify a respective service class requested by the communication packet and corresponding to respective logical channels CID=1, CID=2, etc.

With that operation in the claimed invention, multiple connection handles are specified in accordance with different service requests. A connection handle may be an identifier to identify a connection service. In the example shown in Figure 5 two logical channels CID=1 and CID=2 are set in the upper layer 53 and connection handles A and B corresponding thereto are specified.

Moreover, in the claims a buffer is specified corresponding to the connection handles A, B.

With the claimed structure the logical channels can be mapped to the connection handles so that channels requesting a same service quality can be mapped to the same connection handle. Further, different buffers can be allocated to the different connection handles.

The features recited in the claims are believed to clearly distinguish over the applied art.

The outstanding Office Action cites Klausmeier as the primary reference for the rejections. However, Klausmeier differs from the claims as written.

Klausmeier discloses a queuing circuit 100 that includes various VC queues that correspond to individual connections and QBIN queues that corresponding to different classes of service.<sup>1</sup> Specifically, Klausmeier describes segmenting a data frame into a plurality of cells and injecting each of the cells into a logical queue associated with a connection for the frame.<sup>2</sup> Klausmeier describes injecting the cells by transferring each of the cells to a number of memory locations and establishing a series of linked list pointers which are associated with the memory locations.<sup>3</sup> Klausmeier's series of linked list pointers comprise its queue.<sup>4</sup> Klausmeier describes its cell queue as including a VC queue that

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<sup>1</sup> Klausmeier, Figure 2 and col. 3, line 59 et seq.

<sup>2</sup> Klausmeier, col. 2, lines 63-67.

<sup>3</sup> Klausmeier, col. 3, lines 1-4.

<sup>4</sup> Klausmeier, col. 3, lines 4-5.

corresponds to individual connections and class of service queues which are organized into groups and are used to sort different traffic types.<sup>5</sup> Klausmeier describes its class of service queues or QBIN queues as organized into groups (QBG) that correspond to different physical or virtual interfaces.<sup>6</sup>

Klausmeier, however, does not disclose or suggest the features now clarified in the claims of:

specifying, for a communication packet exchanged from an upper layer, in an interface between the upper layer and a physical layer, one of multiple connection handles each identifying a respective service class requested by the communication packet and corresponding to respective logical channels in the upper layer[.]

The use of the different types of queues VC and QBIN in Klausmeier does not indicate any specification of different connection handles corresponding to different logical channels or service classes.

Moreover, no teachings in Kilkki were cited with respect to the features now recited in the claims, and no teachings in Kilkki are believed to cure the above-discussed deficiencies in Klausmeier.

In view of the present response applicants respectfully submit the claims as written distinguish over the applied art.

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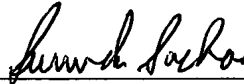
<sup>5</sup> Klausmeier, col. 3, lines 60-64.

<sup>6</sup> Klausmeier, col. 3, lines 64-66.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



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Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 03/06)

Surinder Sachar  
Registration No. 34,423

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